



# Green Cleanup Standard Initiative

February 2009 Update

## Purpose

To develop, through a consensus process, a green cleanup standard and verification system that evaluates and recognizes efforts to maximize the net environmental benefit of cleaning up contaminated sites, an approach known as green remediation or green cleanup. The goal of the standard is to establish a uniform approach, with incentives, to encourage property owners, responsible parties, developers, and communities to use green cleanup practices during project planning and implementation.

## Approach

In conformance with the Standards Development Organization Advancement Act of 2004 and the National Technology Transfer and Advancement Act of 1996, EPA will not develop or adopt a standard. Instead, EPA proposes to collaborate with a standards development organization (SDO) accredited by the American National Standards Institute. A green cleanup standard would increase the use of green approaches by:

- providing uniform definitions, consistent methods, mutual expectations, and common goals that can be used by all state and federal cleanup programs without modification to current policy, guidance or regulation;
- offering a consistent approach which overlays the various regulatory frameworks making it easier for the regulated community to implement;
- rewarding responsible parties for the extra effort involved in green cleanups;
- offering a framework for the new tools being developed to evaluate impacts from cleanups; and
- building upon existing state and local government incentives being developed for green cleanups

EPA established a federal and state cross-program workgroup to: (1) identify the potential benefits and costs associated with a national standard for green cleanups; (2) provide recommendations on the process for developing a standard and options for recognizing a standard; (3) develop guiding principles for a green cleanup standard; (4) ensure input and feedback from the cleanup community during standard development; and (5) evaluate options for verification and incentives. The workgroup is currently evaluating the interest and experience of potential standard development organizations.

## Potential Components of a Green Cleanup Standard

### *Energy Use and Efficiency*

- Use and generate renewable energy
- Use energy efficient treatment systems

### *Water Use and Efficiency*

- Minimize water consumption
- Maximize water recycling

### *Air Quality*

- Minimize emission of greenhouse gases (GHG)
- Maximize sequestration of greenhouse gases
- Use cleaner fuels and diesel retrofit engines
- Include plans for emission mitigation

### *Land and Ecosystems Enhancements*

- Minimize tree removal
- Enhance vegetation using native species
- Minimize habitat disturbance

### *Material Consumption and Waste Generation*

- Recycle materials generated
- Reuse clean soil and material
- Use techniques that minimize waste generation

### *Long-Term Stewardship*

- Integrate cleanup with anticipated reuse
- Minimize long-term use restrictions and obligations

*The Green Cleanup Standard Initiative is sponsored by the U.S. EPA's Office of Solid Waste and Emergency Response (OSWER) and EPA Region 3's Hazardous Site Cleanup Division and Land & Chemicals Division. The Green Cleanup Standards Workgroup includes representatives from all OSWER cleanup programs, EPA regions, and states.*

## Benefits

Benefits for site owners may include federal and state agency recognition, enhanced public acceptance and corporate reputation, and possible qualification for government tax credits, loans or rebates. Benefits to cleanup programs include increased sharing and leveraging of resources to develop, implement and promote greener cleanups. Additional state incentives will be identified in a paper being developed by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) Greener Cleanup Task Force.

## Project Progress

- Researched similar standards and their development processes
- Coordinated with EPA's Standards Executive and the National Institute of Standards and Technology (NIST) to ensure compliance with government policies associated with standards development
- Conducted outreach to assess stakeholder interest and posted a project proposal on EPA's CLU-IN website
- Drafted a workplan to describe objectives and document activities to move the concept forward
- Coordinated with ASTSWMO's Greener Cleanup Task Force
- Conducted EPA senior management briefings: OSWER Office Directors, December 15, 2008; OSWER Deputy Assistant Administrator, January 8, 2009; Office of Site Remediation Enforcement, January 14, 2009
- Developed criteria to evaluate expertise and interest of perspective SDOs

## Upcoming Activities and Working Timeline

- Utilize criteria to evaluate SDOs and initiate interviews (January/February 2009)
- Finalize the project workplan (February 2009)
- Develop a communications plan (February 2009)
- Draft guiding principles for a green cleanup standard (March 2009)
- Sponsor a CLU-In webinar to solicit stakeholder input (March 4, 2009)
- Host a plenary session at the National Brownfields Association "Big Deal" conference (March 24, 2009)
- Finalize guiding principles and forward EPA recommendations to an SDO (June 2009)
- Begin collaboration with an SDO on the standards development process (July 2009)
- Finalize verification and incentives options paper (September 2009)

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## Web Links

EPA CLU-IN/Green Remediation: <http://clu.in.org/greenremediation>

National Institute of Standards and Technology: <http://ts.nist.gov/standards/conformity/cainfo.cfm>